

IN THE SPECIFICATION

Please amend paragraph [0025] as follows:

[0025] FIG. 1 shows a schematic view of a loop thermosyphon system 10 of the invention. System 10 has a die 12 coupled to a condenser 14 via a closed-loop fluid pressure conduit 16A/16B. Die 12 has a plurality of micro-channels 18 formed into its substrate, such as described and shown in more detail below. Condenser 14 is a heat-exchanger that cools fluid 20A/20B within system 10 by convection with air 22 adjacent to condenser 14. For example, condenser 14 is shown with a series of fins 14A to enhance heat transfer to air 22. Though not required, condenser 14 is above die 12 and spaced a distance "H" away to provide sufficient fluid pressure to drive fluid through micro-channels 18, such as described herein. In the preferred embodiment, this pressurized action drives fluid 20A/20B within conduit 16A from condenser 14 and along direction 24A; heated fluid and vapor 20B generated by interaction of fluid 20 with die 12 also drives fluid flow within conduit 16B and along direction 24B. As described below, in the preferred embodiment, a header 29A facilitates coupling between conduit 16A and die 12; a header 29B facilitates coupling between die 12 and conduit 16B.

Please amend paragraph [0027] as follows:

[0027] FIG. 2 shows a cross-sectional side view (not to scale) of die 12 with a plurality of micro-channels 18 etched into die 12 (as shown by etch line 18A). A silicon plate 24 (e.g., glass) may be used to seal micro-channels 18 so as to form a series of fluid conduits 26. Conduits 26, conduits 16A, 16B and condenser 14 form a closed loop fluid communication path. FIG. 2A shows a perspective view of die 12 with a transparent plate 24. FIG. 2A also illustrates apertures 35A/35B formed at either entrance of micro-channel 18 with die 12. As described in more detail below, apertures 35A at the die's outlet (i.e., at header 29B) are larger than apertures 35B at the die's inlet (i.e., at header 29A) so as to encourage preferential fluid flow along direction 30.

Please amend paragraph [0028] as follows:

[0028] FIG. 3 shows a top view of one die 12' without a top plate 24 to illustrate how micro-channels of the invention may be shaped or configured to preferentially flow fluid along one direction 30. Specifically, die 12' is shown with four fluid conduits 32A, 32B, 32C and 32D formed by micro-channels 18' etched in die 12'. Normally, each conduit 32 is substantially the same; however FIG. 3 shows, for illustrative purposes, one different conduit 32D that achieves the same preferential fluid flow via an orifice ~~3233~~. In the preferred embodiment, conduits 32A, 32B, 32C are formed by shaping of micro-channels 18' so as to encourage fluid flow along direction 30. By way of example, as shown, micro-channels 18' are shaped with so that conduits 32A, 32B, 32C form a larger aperture (35A, FIG. 2A) at the right side 40 of die 12' as compared to respective apertures (35B, FIG. 2A) at the left side 42 of die 12'. Accordingly, conduits 32A, 32B, 32C are narrower at side 42 as compared with side 40.